1

SEQUENCE LISTING

```
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<120> ULTRA-SENSITIVE DETECTION SYSTEMS
<130> 01173.0003U2
<150> 60/224,939
<151> 2000-08-11
<150> 60/283,498
<151> 2000-04-12
<160> 33
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Cys Gly Gly Gly Asp Pro Gly Gly Gly Arg
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<400> 2
Ala Gly Ser Leu Asp Pro Ala Gly Ser Leu Arg
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<210> 3
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<400> 3
Ala Gly Ser Met Leu Asp Pro Ala Gly Ser Met Leu Arg
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Ala Gly Ser Leu Ala Asp Pro Gly Ser Leu Arg
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Ala Leu Ser Leu Ala Asp Pro Gly Ser Gly Arg
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<400> 6
Ala Leu Ser Leu Gly Asp Pro Ala Ser Gly Arg
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<210> 7
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 Ala Gly Ser Asp Pro Leu Ala Gly Ser Leu Arg
 <210> 8
 <211> 11
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      construct
 <400> 8
Ala Asp Pro Gly Ser Leu Ala Gly Ser Leu Arg
<210> 9
<211> 357
<212> PRT
<213> Homo sapiens
<400> 9
Met Ser Ala Ile Gln Ala Ala Trp Pro Ser Gly Thr Glu Cys Ile Ala
                                     10
Lys Tyr Asn Phe His Gly Thr Ala Glu Gln Asp Leu Pro Phe Cys Lys
Gly Asp Val Leu Thr Ile Val Ala Val Thr Lys Asp Pro Asn Trp Tyr
                             40
Lys Ala Lys Asn Lys Val Gly Arg Glu Gly Ile Ile Pro Ala Asn Tyr
Val Gln Lys Arg Glu Gly Val Lys Ala Gly Thr Lys Leu Ser Leu Met
                                         75
Pro Trp Phe His Gly Lys Ile Thr Arg Glu Gln Ala Glu Arg Leu Leu
                                     90
Tyr Pro Pro Glu Thr Gly Leu Phe Leu Val Arg Glu Ser Thr Asn Tyr
                                105
Pro Gly Asp Tyr Thr Leu Cys Val Ser Cys Asp Gly Lys Val Glu His
                            120
Tyr Arg Ile Met Tyr His Ala Ser Lys Leu Ser Ile Asp Glu Glu Val
                        135
                                             140
Tyr Phe Glu Asn Leu Met Gln Leu Val Glu His Tyr Thr Ser Asp Ala
                    150
                                        155
Asp Gly Leu Cys Thr Arg Leu Ile Lys Pro Lys Val Met Glu Gly Thr
                165
                                    170
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Val Ala Ala Gln Asp Glu Phe Tyr Arg Ser Gly Trp Ala Leu Asn Met Lys Glu Leu Lys Leu Leu Gln Thr Ile Gly Lys Gly Glu Phe Gly Asp Val Met Leu Gly Asp Tyr Arg Gly Asn Lys Val Ala Val Lys Cys Ile 215 Lys Asn Asp Ala Thr Ala Gln Ala Phe Leu Ala Glu Ala Ser Val Met 230 235 Thr Gln Leu Arg His Ser Asn Leu Val Gln Leu Leu Gly Val Ile Val 250 Glu Glu Lys Gly Gly Leu Tyr Ile Val Thr Glu Tyr Met Ala Lys Gly 260 265 Ser Leu Val Asp Tyr Leu Arg Ser Arg Gly Arg Ser Val Leu Gly Gly 280 Asp Cys Leu Leu Lys Phe Ser Leu Asp Val Cys Glu Ala Met Glu Tyr 300 Leu Glu Gly Asn Asn Phe Val His Arg Asp Leu Ala Ala Arg Asn Val 310 315 Leu Val Ser Glu Asp Asn Val Ala Lys Val Ser Asp Phe Gly Leu Thr 325 330 Lys Glu Ala Ser Thr Pro Arg Thr Arg Ala Ser Cys Gln Ser Ser Gly 340 345 Gln Pro Leu Arg Pro 355

<210> 10 <211> 536 <212> PRT

<213> Homo sapiens

<400> 10

Met Gly Ser Asn Lys Ser Lys Pro Lys Asp Ala Ser Gln Arg Arg Ser Leu Glu Pro Ala Glu Asn Val His Gly Ala Gly Gly Ala Phe Pro Ala Ser Gln Thr Pro Ser Lys Pro Ala Ser Ala Asp Gly His Arg 40 Gly Pro Ser Ala Ala Phe Ala Pro Ala Ala Ala Glu Pro Lys Leu Phe Gly Gly Phe Asn Ser Ser Asp Thr Val Thr Ser Pro Gln Arg Ala Gly Pro Leu Ala Gly Gly Val Thr Thr Phe Val Ala Leu Tyr Asp Tyr Glu 90 Ser Arg Thr Glu Thr Asp Leu Ser Phe Lys Lys Gly Glu Arg Leu Gln 105 Ile Val Asn Asn Thr Glu Gly Asp Trp Trp Leu Ala His Ser Leu Ser 120 Thr Gly Gln Thr Gly Tyr Ile Pro Ser Asn Tyr Val Ala Pro Ser Asp 135 140 Ser Ile Gln Ala Glu Glu Trp Tyr Phe Gly Lys Ile Thr Arg Arg Glu 150 155 Ser Glu Arg Leu Leu Leu Asn Ala Glu Asn Pro Arg Gly Thr Phe Leu 165 170

<213> Artificial Sequence

Val Arg Glu Ser Glu Thr Thr Lys Gly Ala Tyr Cys Leu Ser Val Ser 185 Asp Phe Asp Asn Ala Lys Gly Leu Asn Val Lys His Tyr Lys Ile Arg 200 205 Lys Leu Asp Ser Gly Gly Phe Tyr Ile Thr Ser Arg Thr Gln Phe Asn 215 220 Ser Leu Gln Gln Leu Val Ala Tyr Tyr Ser Lys His Ala Asp Gly Leu 230 235 Cys His Arg Leu Thr Thr Val Cys Pro Thr Ser Lys Pro Gln Thr Gln 250 Gly Leu Ala Lys Asp Ala Trp Glu Ile Pro Arg Glu Ser Leu Arg Leu 260 265 Glu Val Lys Leu Gly Gln Gly Cys Phe Gly Glu Val Trp Met Gly Thr 280 Trp Asn Gly Thr Thr Arg Val Ala Ile Lys Thr Leu Lys Pro Gly Thr Met Ser Pro Glu Ala Phe Leu Gln Glu Ala Gln Val Met Lys Lys Leu 310 315 Arg His Glu Lys Leu Val Gln Leu Tyr Ala Val Val Ser Glu Glu Pro 325 330 Ile Tyr Ile Val Thr Glu Tyr Met Ser Lys Gly Ser Leu Leu Asp Phe 340 345 Leu Lys Gly Glu Thr Gly Lys Tyr Leu Arg Leu Pro Gln Leu Val Asp 360 Met Ala Ala Gln Ile Ala Ser Gly Met Ala Tyr Val Glu Arg Met Asn 375 380 Tyr Val His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val Gly Glu Asn 390 Leu Val Cys Lys Val Ala Asp Phe Gly Leu Ala Arg Leu Ile Glu Asp 405 410 Asn Glu Tyr Thr Ala Arg Gln Gly Ala Lys Phe Pro Ile Lys Trp Thr 425 Ala Pro Glu Ala Ala Leu Tyr Gly Arg Phe Thr Ile Lys Ser Asp Val 440 Trp Ser Phe Gly Ile Leu Leu Thr Glu Leu Thr Thr Lys Gly Arg Val 455 Pro Tyr Pro Gly Met Val Asn Arg Glu Val Leu Asp Gln Val Glu Arg 470 475 Gly Tyr Arg Met Pro Cys Pro Pro Glu Cys Pro Glu Ser Leu His Asp 490 Leu Met Cys Gln Cys Trp Arg Lys Glu Pro Glu Glu Arg Pro Thr Phe 505 Glu Tyr Leu Gln Ala Phe Leu Glu Asp Tyr Phe Thr Ser Thr Glu Pro 520 Gln Tyr Gln Pro Gly Glu Asn Leu 530 535 <210> 11 <211> 13 <212> PRT

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       construct
 <400> 11
 Cys Gly Ala Gly Ser Asp Pro Leu Ala Gly Ser Leu Arg
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       construct
<400> 12
Gly Ser Trp Phe Ser Gly Met Cys Ala Arg
                  5
<210> 13
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence; Note=synthetic
      construct
<400> 13
Tyr Phe Met Thr Ser Gly Cys Asp Pro Gly Gly Arg
<210> 14
<211> 12
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence; Note=synthetic
      construct
Tyr Phe Met Thr Ser Gly Asp Pro Cys Gly Gly Arg
<210> 15
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
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<223> Description of Artificial Sequence; Note=synthetic
              construct
       <400> 15
       Tyr Phe Met Thr Ser Asp Pro Gly Cys Gly Gly Arg
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       <210> 16
       <211> 12
       <212> PRT
       <213> Artificial Sequence
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             construct
<400> 16
       Tyr Phe Met Thr Asp Pro Ser Gly Cys Gly Gly Arg
Ū
        1
                        5
١Ō
       <210> 17
ĩU
       <211> 12
m
       <212> PRT
(fi
       <213> Artificial Sequence
₹
<220>
ľÓ
       <223> Description of Artificial Sequence; Note=synthetic
             construct
Ų
       <400> 17
       Tyr Phe Met Asp Pro Thr Ser Gly Cys Gly Gly Arg
       <210> 18
       <211> 19
      <212> PRT
      <213> Artificial Sequence
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      <223> Description of Artificial Sequence; Note=synthetic
            construct
      <400> 18
      Ala Gly Ser Leu Ala Gly Ser Leu Asp Pro Ala Gly Ser Leu Ala Gly
       1
      Ser Leu Arg
      <210> 19
      <211> 18
      <212> DNA
      <213> Artificial Sequence
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<220>		
<223>	Description of Artificial Sequence; Note=synthetic construct	
<400>	19	
gatta	gccac gtcgccgt	18
<210>	20	
<211>	18	
<212>		
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<400>	20	
gcatat	taget ageteteg	18
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<400>	21	
gacgac	eggeg aegtggetge ge	22
<210>	22	
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<400>	22	
acggcg	acgt ggctaatc	18
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<211>		
<212>		
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<220>		
	Description of Artificial Sequence; Note=synthetic	
	construct	

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<400> 23
 cgtcatcgta g
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 <211> 15
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<220>
<223> Description of Artificial Sequence; Note=synthetic
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<221> VARIANT
<222> 1-15
<223> Xaa = any amino acid
<400> 24
Cys Phe Xaa Xaa Xaa Xaa Asp Pro Xaa Xaa Xaa Xaa Arg
<210> 25
<211> 35
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<213> Artificial Sequence
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<223> Description of Artificial Sequence; Note=synthetic
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<221> VARIANT
<222> 1-35
<223> Xaa = any amino acid
<400> 25
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Pro Xaa Xaa Xaa Xaa
                                    10
Xaa Xaa Xaa Xaa Asp Pro Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa
                                25
Xaa Xaa Xaa
        35
<210> 26
<211> 34
<212> PRT
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<220>
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     construct
<221> VARIANT
<222> 1-34
<223> Xaa = any amino acid
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<400> 26
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Pro Xaa Xaa Xaa Xaa
                                     10
Xaa Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa
            20
                                 25
Xaa Xaa
<210> 27
<211> 11
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<400> 27
Ala Gly Ser Leu Ala Gly Ser Leu Asp Pro Arg
<210> 28
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<400> 28
Cys Gly Trp Ala Gly Ser Asp Pro Leu Ala Gly Ser Leu Arg
<210> 29
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Cys Gly Trp Ala Gly Ser Leu Asp Pro Ala Gly Ser Leu Arg
<210> 30
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<213> Artificial Sequence
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 Cys Gly Trp Ala Gly Ser Leu Ala Asp Pro Gly Ser Leu Arg
 <210> 31
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 <400> 31
Cys Gly Trp Ala Gly Ser Leu Ala Gly Asp Pro Ser Leu Arg Cys Gly
Trp Ala Gly Ser Leu Ala Gly Ser Asp Pro Leu Arg
<210> 32
<211> 14
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<400> 32
Cys Gly Trp Ala Gly Ser Leu Ala Gly Ser Asp Pro Leu Arg
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Arg Leu Ser Gly Ala Asp Pro Leu Ser Gly Ala Trp Gly Cys
                 5
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